

Life Science

Structure, Function, and Information Processing

Directions: Read the following passage observing the rose and its parts in the picture that follows. Then answer the Wrap It Up! questions.

Lesson 1: External Structures of a Wild Rose

Have you ever seen a wild rose plant like the one in the photo? The rose is a type of plant that produces flowers. Its flowers are beautiful, but they are also important to the plant. Like all plants, the wild rose is made up of different kinds of structures. Its external structures are the parts that you can see on the outside of the plant. They include leaves, stems, roots, and flowers.

Leaves, stems, and roots have important functions in the growth and survival of the plant. The wild rose plant also has structures that allow it to reproduce---its flowers. Flowers produce seeds, which can grow into new plants.



The parts of the **flower** are the flower itself which allows the plant to reproduce. The **petals** are the colorful part of the flower which attract the bees and other insects, which carry pollen from one flower to another. When an insect leaves pollen on a flower, fruit and seeds can grow. The **leaves** of the plant use water from the soil, carbon dioxide from air, and energy from sunlight to make food for the plant. The **stem** supports the leaves and the flowers. As the plant grows, its stems bend toward the light. This behavior helps the leaves get as much sunlight as possible. The **roots** take in water and dissolved mineral nutrients from the soil. Roots grow downward, allowing them to reach water in the ground. Sharp **thorns** protect the plant from hungry animals.

(see picture that follows this page)



Directions: Observe the rose in the picture that follows then answer the Wrap It Up! Questions

Wrap It Up! Questions

1. **List** Name the five external features of a rose plant.

2. **Explain** How do the roots of a rose plant help the plant grow?

3. **Evaluate** Could a rose plant survive without leaves? Why or why not?
